

CERTIFICATE OF ANALYSIS

Work Order : EW2303657

Client : KIAMA COUNCIL Laboratory

Contact : Guy Stearn

Address : 11 MANNING STREET

KIAMA NSW, AUSTRALIA 2533

Telephone

Project : Gerroa Landfill

Order number C-O-C number

Sampler : Michael Santos, Tom Roose

Site : Gerroa Landfill Quote number : WO/010/2021

No. of samples received : 21 No. of samples analysed : 21 Page : 1 of 11

: Environmental Division NSW South Coast

Contact : Aneta Prosaroski

Address : 1/19 Ralph Black Dr, North Wollongong 2500 NSW Australia

Telephone : +61 2 4225 3125

Date Samples Received : 24-Aug-2023 17:00

Date Analysis Commenced : 24-Aug-2023

Issue Date : 01-Sep-2023 13:02



ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with **Quality Review and Sample Receipt Notification.**

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	Position	Accreditation Category
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Dian Dao	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Robert DaLio	Sampler	Laboratory - Wollongong, NSW

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General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key: CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

LOR = Limit of reporting

- ^ = This result is computed from individual analyte detections at or above the level of reporting
- ø = ALS is not NATA accredited for these tests.
- ~ = Indicates an estimated value.
- Analytical work for this work order will be conducted at ALS Sydney.
- ED041G: LOR raised for Sulfate on sample 3 due to sample matrix.
- As per QWI EN55-3 Data Interpreting Procedures, Ionic balances are typically calculated using Major Anions Chloride, Alkalinity and Sulfate; and Major Cations Calcium, Magnesium, Potassium and Sodium.

 Where applicable and dependent upon sample matrix, the Ionic Balance may also include the additional contribution of Ammonia, Dissolved Metals by ICPMS and H+ to the Cations and Nitrate, SiO2 and Fluoride to
- It has been noted that Ammonia is greater than TKN, however this difference is within the limits of experimental variation on various samples
- pH performed by ALS Wollongong via in-house method EA005FD and EN67 PK.
- Electrical conductivity performed by ALS Wollongong via in-house method EA010FD and EN67 PK.
- ORP (Oxidation Reduction Potential) performed by ALS Wollongong via in-house method EA075FD and EN67 PK.
- Sampling and groundwater depth measurements completed by ALS Wollongong via inhouse sampling method EN/67.11 Groundwater Sampling Via High Flow Method.
- Sampling completed by ALS Wollongong in accordance with in-house sampling method EN/67.6 Rivers and Streams
- Dissolved oxygen (DO) performed by ALS Wollongong via in-house method EP025FD and EN67 PK.
- All field analysis performed by ALS Wollongong were completed at the time of sampling.
- Sampling completed by ALS Wollongong in accordance with in-house sampling method EN/67.4 Lakes and Reservoirs
- Sodium Adsorption Ratio (where reported): Where results for Na, Ca or Mg are <LOR, a concentration at half the reported LOR is incorporated into the SAR calculation. This represents a conservative approach for Na relative to the assumption that <LOR = zero concentration and a conservative approach for Ca & Mg relative to the assumption that <LOR is equivalent to the LOR concentration.
- ED045G: The presence of Thiocyanate, Thiosulfate and Sulfite can positively contribute to the chloride result, thereby may bias results higher than expected. Results should be scrutinised accordingly.

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Sub-Matrix: WATER (Matrix: WATER)			Sample ID	MW1D	MW1S	MW3	MW4	MW5
		Sampli	ing date / time	24-Aug-2023 11:15	24-Aug-2023 11:22	24-Aug-2023 11:05	24-Aug-2023 12:19	24-Aug-2023 10:55
Compound	CAS Number	LOR	Unit	EW2303657-001	EW2303657-002	EW2303657-003	EW2303657-004	EW2303657-005
				Result	Result	Result	Result	Result
EA005FD: Field pH		ed (
рН		0.1	pH Unit	7.6		7.4	7.2	7.9
EA010FD: Field Conductivity								
Electrical Conductivity (Non Compensated)		1	μS/cm	375		587	512	331
EA015: Total Dissolved Solids dried a	t 180 ± 5 °C							
Total Dissolved Solids @180°C		10	mg/L	212		397	298	198
EA075FD: Field Redox Potential								
Redox Potential		0.1	mV	-162		-170	-92.4	-116
ED037P: Alkalinity by PC Titrator								
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1		<1	<1	<1
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1		<1	<1	<1
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	200		266	254	148
Total Alkalinity as CaCO3		1	mg/L	200		266	254	148
ED041G: Sulfate (Turbidimetric) as SC	04 2- by DA							
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	<1		<10	5	<1
ED045G: Chloride by Discrete Analyse	er							
Chloride	16887-00-6	1	mg/L	10		36	19	24
ED093F: Dissolved Major Cations								
Calcium	7440-70-2	1	mg/L	57		83	93	58
Magnesium	7439-95-4	1	mg/L	16		9	7	4
Sodium	7440-23-5	1	mg/L	8		21	11	9
Potassium	7440-09-7	1	mg/L	4		2	3	1
EG020F: Dissolved Metals by ICP-MS								
Manganese	7439-96-5	0.001	mg/L	0.013		0.118	0.105	0.002
Iron	7439-89-6	0.05	mg/L	1.88		10.3	1.53	<0.05
EK040P: Fluoride by PC Titrator								
Fluoride	16984-48-8	0.1	mg/L	0.2		0.1	0.2	0.1
EK055G: Ammonia as N by Discrete A	nalyser							
Ammonia as N	7664-41-7	0.01	mg/L	0.56		0.30	0.19	0.02
EK057G: Nitrite as N by Discrete Ana	lyser							
Nitrite as N	14797-65-0	0.01	mg/L	<0.01		<0.01	<0.01	<0.01
EK058G: Nitrate as N by Discrete Ana	alyser							
Nitrate as N	14797-55-8	0.01	mg/L	<0.01		0.02	0.02	<0.01

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Sub-Matrix: WATER (Matrix: WATER)			Sample ID	MW1D	MW1S	MW3	MW4	MW5			
		Sampli	ng date / time	24-Aug-2023 11:15	24-Aug-2023 11:22	24-Aug-2023 11:05	24-Aug-2023 12:19	24-Aug-2023 10:55			
Compound	CAS Number	LOR	Unit	EW2303657-001	EW2303657-002	EW2303657-003	EW2303657-004	EW2303657-005			
				Result	Result	Result	Result	Result			
EK059G: Nitrite plus Nitrate as N (NOx) b	y Discrete Ana	lyser									
Nitrite + Nitrate as N		0.01	mg/L	<0.01		0.02	0.02	<0.01			
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser											
Total Kjeldahl Nitrogen as N		0.1	mg/L	0.8		1.7	1.9	0.3			
EK062G: Total Nitrogen as N (TKN + NOx)	by Discrete An	alyser									
^ Total Nitrogen as N		0.1	mg/L	0.8		1.7	1.9	0.3			
EK067G: Total Phosphorus as P by Discre	ete Analyser										
Total Phosphorus as P		0.01	mg/L	0.12		0.24	2.41	0.04			
EN055: Ionic Balance											
Ø Total Anions		0.01	meq/L	4.28		6.33	5.71	3.63			
Ø Total Cations		0.01	meq/L	4.61		5.85	5.77	3.64			
ø Ionic Balance		0.01	%	3.75		3.97	0.50	0.09			
EN67 PK: Field Tests											
Field Observations		0.01			Dry Site						
EP002: Dissolved Organic Carbon (DOC)											
Dissolved Organic Carbon		1	mg/L	6		32	11	4			
EP025FD: Field Dissolved Oxygen											
Dissolved Oxygen		0.01	mg/L	1.60		0.48	4.29	0.96			
QWI-EN 67.11 Sampling of Groundwaters											
Depth		0.01	m	3.68		4.11	4.65	4.60			

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Sub-Matrix: WATER (Matrix: WATER)			Sample ID	MW6D	MW6S	MW7D	MW7S	MW9
		Sampl	ling date / time	24-Aug-2023 12:39	24-Aug-2023 12:28	24-Aug-2023 10:35	24-Aug-2023 10:45	24-Aug-2023 13:54
Compound	CAS Number	LOR	Unit	EW2303657-006	EW2303657-007	EW2303657-008	EW2303657-009	EW2303657-010
				Result	Result	Result	Result	Result
EA005FD: Field pH								
pH		0.1	pH Unit	7.2		7.2	7.8	6.6
EA010FD: Field Conductivity								
Electrical Conductivity (Non Compensated)		1	μS/cm	1090		613	424	15800
EA015: Total Dissolved Solids dried at	180 ± 5 °C							
Total Dissolved Solids @180°C		10	mg/L	520		336	266	10400
EA075FD: Field Redox Potential								
Redox Potential		0.1	mV	-189		-132	-161	33.8
ED037P: Alkalinity by PC Titrator								
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1		<1	<1	<1
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1		<1	<1	<1
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	508		247	193	87
Total Alkalinity as CaCO3		1	mg/L	508		247	193	87
ED041G: Sulfate (Turbidimetric) as SO	4 2- by DA							
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	<1		15	8	643
ED045G: Chloride by Discrete Analyse	er							
Chloride	16887-00-6	1	mg/L	50		37	26	5260
ED093F: Dissolved Major Cations								
Calcium	7440-70-2	1	mg/L	83		80	53	207
Magnesium	7439-95-4	1	mg/L	17		9	9	391
Sodium	7440-23-5	1	mg/L	35		25	34	2660
Potassium	7440-09-7	1	mg/L	40		8	2	87
EG020F: Dissolved Metals by ICP-MS								
Manganese	7439-96-5	0.001	mg/L	0.060		0.046	0.017	0.011
Iron	7439-89-6	0.05	mg/L	6.45		5.17	0.90	0.42
EK040P: Fluoride by PC Titrator								
Fluoride	16984-48-8	0.1	mg/L	0.5		0.2	0.1	0.1
EK055G: Ammonia as N by Discrete A								
Ammonia as N	7664-41-7	0.01	mg/L	34.7		4.45	0.07	0.08
EK057G: Nitrite as N by Discrete Analy	yser							
Nitrite as N	14797-65-0	0.01	mg/L	<0.01		<0.01	<0.01	<0.01
EK058G: Nitrate as N by Discrete Anal	lyser							
Nitrate as N	14797-55-8	0.01	mg/L	0.02		<0.01	<0.01	0.06

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Sub-Matrix: WATER (Matrix: WATER)			Sample ID	MW6D	MW6S	MW7D	MW7S	MW9
	Sampling date / time				24-Aug-2023 12:28	24-Aug-2023 10:35	24-Aug-2023 10:45	24-Aug-2023 13:54
Compound	CAS Number	LOR	Unit	EW2303657-006	EW2303657-007	EW2303657-008	EW2303657-009	EW2303657-010
				Result	Result	Result	Result	Result
EK059G: Nitrite plus Nitrate as N (NOx)	by Discrete Ana	lyser						
Nitrite + Nitrate as N		0.01	mg/L	0.02		<0.01	<0.01	0.06
EK061G: Total Kjeldahl Nitrogen By Dis	crete Analyser							
Total Kjeldahl Nitrogen as N		0.1	mg/L	32.9		5.0	0.5	2.4
EK062G: Total Nitrogen as N (TKN + NO	x) by Discrete Ar	alyser						
^ Total Nitrogen as N		0.1	mg/L	32.9		5.0	0.5	2.5
EK067G: Total Phosphorus as P by Disc	crete Analyser							
Total Phosphorus as P		0.01	mg/L	2.84		0.86	0.13	0.28
EN055: Ionic Balance								
Ø Total Anions		0.01	meq/L	11.6		6.29	4.76	164
ø Total Cations		0.01	meq/L	10.6				
ø Total Cations		0.01	meq/L			6.02	4.92	160
Ø Ionic Balance		0.01	%	4.54				
Ø Ionic Balance		0.01	%			2.16	1.65	0.95
EN67 PK: Field Tests								
Field Observations		0.01			Dry Site			
EP002: Dissolved Organic Carbon (DOC	;)							
Dissolved Organic Carbon		1	mg/L	19		7	15	11
EP025FD: Field Dissolved Oxygen								
Dissolved Oxygen		0.01	mg/L	0.50		<0.01	0.06	4.54
QWI-EN 67.11 Sampling of Groundwater	rs							
Depth		0.01	m	5.05		4.78	4.63	1.80

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Sub-Matrix: WATER (Matrix: WATER)			Sample ID	MW10	MW11	MW12	MW13	MW14
		Sampli	ing date / time	24-Aug-2023 14:00	24-Aug-2023 13:40	24-Aug-2023 12:00	24-Aug-2023 11:46	24-Aug-2023 11:30
Compound	CAS Number	LOR	Unit	EW2303657-011	EW2303657-012	EW2303657-013	EW2303657-014	EW2303657-015
				Result	Result	Result	Result	Result
EA005FD: Field pH		es established						
рН		0.1	pH Unit		6.2	7.4	7.7	7.3
EA010FD: Field Conductivity								
Electrical Conductivity (Non Compensated)		1	μS/cm		4400	1100	554	1570
EA015: Total Dissolved Solids dried at	t 180 ± 5 °C							
Total Dissolved Solids @180°C		10	mg/L		2650	595	300	748
EA075FD: Field Redox Potential								
Redox Potential		0.1	mV		-26.1	-162	-182	-150
ED037P: Alkalinity by PC Titrator								
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L		<1	<1	<1	<1
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L		<1	<1	<1	<1
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L		47	382	266	528
Total Alkalinity as CaCO3		1	mg/L		47	382	266	528
ED041G: Sulfate (Turbidimetric) as SC	04 2- by DA							
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L		166	15	8	28
ED045G: Chloride by Discrete Analyse	er							
Chloride	16887-00-6	1	mg/L		1320	144	26	206
ED093F: Dissolved Major Cations								
Calcium	7440-70-2	1	mg/L		46	73	53	76
Magnesium	7439-95-4	1	mg/L		94	27	23	42
Sodium	7440-23-5	1	mg/L		686	90	26	114
Potassium	7440-09-7	1	mg/L		25	29	14	46
EG020F: Dissolved Metals by ICP-MS								
Manganese	7439-96-5	0.001	mg/L		0.012	0.015	0.011	0.028
Iron	7439-89-6	0.05	mg/L		2.29	4.02	1.66	3.00
EK040P: Fluoride by PC Titrator								
Fluoride	16984-48-8	0.1	mg/L		0.1	0.1	0.3	0.3
EK055G: Ammonia as N by Discrete A	nalyser							
Ammonia as N	7664-41-7	0.01	mg/L		0.46	15.8	6.55	42.3
EK057G: Nitrite as N by Discrete Anal	lyser							
Nitrite as N	14797-65-0	0.01	mg/L		<0.01	<0.01	<0.01	<0.01
EK058G: Nitrate as N by Discrete Ana	ılyser							
Nitrate as N	14797-55-8	0.01	mg/L		0.01	<0.01	<0.01	<0.01

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Sub-Matrix: WATER (Matrix: WATER)			Sample ID	MW10	MW11	MW12	MW13	MW14
	Sampling date / time				24-Aug-2023 13:40	24-Aug-2023 12:00	24-Aug-2023 11:46	24-Aug-2023 11:30
Compound	CAS Number	LOR	Unit	EW2303657-011	EW2303657-012	EW2303657-013	EW2303657-014	EW2303657-015
				Result	Result	Result	Result	Result
EK059G: Nitrite plus Nitrate as N (NOx)	by Discrete Ana	lyser						
Nitrite + Nitrate as N		0.01	mg/L		0.01	<0.01	<0.01	<0.01
EK061G: Total Kjeldahl Nitrogen By Disc	crete Analyser							
Total Kjeldahl Nitrogen as N		0.1	mg/L		4.9	15.5	7.0	36.7
EK062G: Total Nitrogen as N (TKN + NO	x) by Discrete Ar	alyser						
^ Total Nitrogen as N		0.1	mg/L		4.9	15.5	7.0	36.7
EK067G: Total Phosphorus as P by Disc	rete Analyser							
Total Phosphorus as P		0.01	mg/L		0.46	0.14	0.17	0.15
EN055: Ionic Balance								
Ø Total Anions		0.01	meq/L		41.6	12.0	6.21	16.9
ø Total Cations		0.01	meq/L					16.4
ø Total Cations		0.01	meq/L		40.5	10.5	6.03	
Ø Ionic Balance		0.01	%					1.64
Ø Ionic Balance		0.01	%		1.36	6.59	1.54	
EN67 PK: Field Tests								
Field Observations		0.01		Dry Site				
EP002: Dissolved Organic Carbon (DOC)							
Dissolved Organic Carbon		1	mg/L		38	16	8	19
EP025FD: Field Dissolved Oxygen								
Dissolved Oxygen		0.01	mg/L		3.92	0.88	0.66	0.84
QWI-EN 67.11 Sampling of Groundwater	s							
Depth		0.01	m		2.21	3.42	3.63	3.14

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Sub-Matrix: WATER (Matrix: WATER)			Sample ID	ML-1	ML-2	ML-3	ML-4	ML-5
	Sampling date / time				24-Aug-2023 14:06	24-Aug-2023 13:17	24-Aug-2023 13:23	24-Aug-2023 13:46
Compound	CAS Number	LOR	Unit	EW2303657-016	EW2303657-017	EW2303657-018	EW2303657-019	EW2303657-020
				Result	Result	Result	Result	Result
EA005FD: Field pH								
pН		0.1	pH Unit	7.2	7.8	7.2	7.2	7.0
EA010FD: Field Conductivity								
Electrical Conductivity (Non Compensated)		1	μS/cm	1710	43400	806	2020	15800
EA015: Total Dissolved Solids dried a	t 180 ± 5 °C							
Total Dissolved Solids @180°C		10	mg/L	931	31300	442	1180	10100
EA075FD: Field Redox Potential								
Redox Potential		0.1	mV	40.9	29.7	-12.6	22.5	22.7
ED037P: Alkalinity by PC Titrator								
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	<1	<1	<1
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	<1	<1	<1
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	131	122	115	132	132
Total Alkalinity as CaCO3		1	mg/L	131	122	115	132	132
ED093T: Total Major Cations								
Calcium	7440-70-2	1	mg/L	49	391	38	49	142
Magnesium	7439-95-4	1	mg/L	35	1130	16	42	351
Sodium	7440-23-5	1	mg/L	255	9790	106	305	2810
Potassium	7440-09-7	1	mg/L	12	346	6	13	104
EG020T: Total Metals by ICP-MS								
Manganese	7439-96-5	0.001	mg/L	0.062	0.024	0.054	0.071	0.040
Iron	7439-89-6	0.05	mg/L	1.17	0.13	1.15	1.38	0.71
EK055G: Ammonia as N by Discrete A	Analyser							
Ammonia as N	7664-41-7	0.01	mg/L	0.10	0.19	0.15	0.12	0.31
EK057G: Nitrite as N by Discrete Ana	lyser							
Nitrite as N	14797-65-0	0.01	mg/L	<0.01	<0.01	<0.01	<0.01	0.02
EK058G: Nitrate as N by Discrete Ana	alyser							
Nitrate as N	14797-55-8	0.01	mg/L	0.26	0.36	0.03	0.08	0.22
EK059G: Nitrite plus Nitrate as N (NO	x) by Discrete Ana	lyser						
Nitrite + Nitrate as N		0.01	mg/L	0.26	0.36	0.03	0.08	0.24
EK061G: Total Kjeldahl Nitrogen By D	iscrete Analyser							
Total Kjeldahl Nitrogen as N		0.1	mg/L	0.9	1.4	0.8	0.8	0.8
EK062G: Total Nitrogen as N (TKN + N	NOx) by Discrete Ar	nalvser_						
^ Total Nitrogen as N		0.1	mg/L	1.2	1.8	0.8	0.9	1.0
			J. –	**=		1 222	1	

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Sub-Matrix: WATER (Matrix: WATER)			Sample ID	ML-1	ML-2	ML-3	ML-4	ML-5
		Sampli	ng date / time	24-Aug-2023 13:28	24-Aug-2023 14:06	24-Aug-2023 13:17	24-Aug-2023 13:23	24-Aug-2023 13:46
Compound	CAS Number	LOR	Unit	EW2303657-016	EW2303657-017	EW2303657-018	EW2303657-019	EW2303657-020
				Result	Result	Result	Result	Result
EK067G: Total Phosphorus as P b	y Discrete Analyser							
Total Phosphorus as P		0.01	mg/L	0.04	0.06	0.04	0.04	0.02
EP025FD: Field Dissolved Oxygen								
Dissolved Oxygen		0.01	mg/L	5.13	9.27	5.18	3.78	6.73

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	BLANK	 	
		Sampli	ng date / time	24-Aug-2023 12:58	 	
Compound	CAS Number	LOR	Unit	EW2303657-021	 	
				Result	 	
ED093F: Dissolved Major Cations						
Calcium	7440-70-2	1	mg/L	<1	 	
Magnesium	7439-95-4	1	mg/L	<1	 	
Sodium	7440-23-5	1	mg/L	<1	 	
Potassium	7440-09-7	1	mg/L	<1	 	
EG020F: Dissolved Metals by ICP-MS						
Manganese	7439-96-5	0.001	mg/L	<0.001	 	
Iron	7439-89-6	0.05	mg/L	<0.05	 	

Inter-Laboratory Testing

Analysis conducted by ALS Sydney, NATA accreditation no. 825, site no. 10911 (Chemistry) 14913 (Biology).

(WATER) ED037P: Alkalinity by PC Titrator (WATER) EK040P: Fluoride by PC Titrator

(WATER) ED041G: Sulfate (Turbidimetric) as SO4 2- by DA

(WATER) EP002: Dissolved Organic Carbon (DOC) (WATER) EG020F: Dissolved Metals by ICP-MS (WATER) ED093F: Dissolved Major Cations

(WATER) EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser

(WATER) EK061G: Total Kjeldahl Nitrogen By Discrete Analyser

(WATER) EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser

(WATER) EK058G: Nitrate as N by Discrete Analyser (WATER) EK057G: Nitrite as N by Discrete Analyser (WATER) EK055G: Ammonia as N by Discrete Analyser

(WATER) EK067G: Total Phosphorus as P by Discrete Analyser

(WATER) EA015: Total Dissolved Solids dried at 180 ± 5 °C

(WATER) EN055: Ionic Balance

(WATER) ED045G: Chloride by Discrete Analyser (WATER) EG020T: Total Metals by ICP-MS (WATER) ED093T: Total Major Cations